

# CALIBRATION PROCEDURE

## 1. Pan / Tilt Calibration

### ■ The Pan / Tilt Calibration is required in the following cases.

- After replacing the EEPROM, Pan / Tilt and Zoom wheel Calibration is required.  
(Default software data will be stored in the EEPROM automatically.)
- In the case of changing of the combination of the Main Unit and the 3D Joystick Unit as shown in the Exploded View(10/10).
- In the case of replacing of the Joystick Board (PCB 5) or VR101 and other parts on it.
- In case of replacing the Main Board (PCB 1) or EEPROM (IC6 ) and other parts on it.
- In case that calibrated data has been changed by operation mistake.

### ■ Procedure

1. Turn off the power.
2. To execute the Pan / Tilt Calibration Mode, Turn on the power while pressing the [9] and [MON(ESC)] keys simultaneously.  
The LCD on the Front Panel will indicate as right.

```
Pan/Tilt Calibration
Admin Password _____
```

3. Enter the administrator password.  
Notes: • The factory default is "650".  
• To delete a character, press the CLEAR button.

Note: Just example, It depends on Unit

4. Press the [CAM(SET)] key.  
The LCD on the Front Panel will indicate as right.

```
U : F 2   D : 0 9   TC : 7 8           0
R : E 6   L : 0 6   PC : 7 5           0
```

5. Press the [CAM(SET)] key for the starting adjustment.  
The LCD on the Front Panel will indicate as right.

```
U : _ _   D : _ _   TC : _ _           7 2
R : _ _   L : _ _   PC : _ _
```

Blinking

6. Turn and keep the Joystick to fully upper side.  
The LCD on the Front Panel will indicate as right.

```
U : _ _   D : _ _   TC : _ _           F 0
R : _ _   L : _ _   PC : _ _
```

7. Press the [CAM(SET)] key while turning the Joystick to upper side.

The LCD on the Front Panel will indicate as right.

```
U : F 1   D : _ _   TC : _ _           7 D
R : _ _   L : _ _   PC : _ _
```

8. Turn and keep the Joystick to fully down side.  
The LCD on the Front Panel will indicate as right.

```
U : F 1   D : _ _   TC : _ _           0 8
R : _ _   L : _ _   PC : _ _
```

9. Press the [CAM(SET)] key while turning the Joystick to down side.  
The LCD on the Front Panel will indicate as right.

```
U : F 1   D : 0 8   TC : _ _           0 8
R : _ _   L : _ _   PC : _ _
```

10. Return the Joystick to center.  
The LCD on the Front Panel will indicate as right.  
Note : It needs your hand to release with flipping.

```
U : F 1   D : 0 8   TC : _ _           7 0
R : _ _   L : _ _   PC : _ _
```

11. Press the [CAM(SET)] key.  
The LCD on the Front Panel will indicate as right.

```
U : F 1   D : 0 8   TC : 7 0           7 9
R : _ _   L : _ _   PC : _ _
```

12. Turn and keep the Joystick to fully right side.  
The LCD on the Front Panel will indicate as right.

```
U : F 1   D : 0 8   TC : 7 0
R : _ _   L : _ _   PC : _ _           F 1
```

13. Press the [CAM(SET)] key while turning the Joystick to right side.  
The LCD on the Front Panel will indicate as right.

```
U : F 1   D : 0 8   TC : 7 0
R : F 0   L : _ _   PC : _ _           F 0
```

14. Turn and keep the Joystick to fully left side.  
The LCD on the Front Panel will indicate as right.

```
U : F1  D : 08  TC : 70
R : F0  L : 07  PC : 07
```

15. Press the [CAM(SET)] key while turning the Joystick to left side.

The LCD on the Front Panel will indicate as right.

```
U : F1  D : 08  TC : 70
R : F0  L : 07  PC : 07
```

16. Return the Joystick to center.  
The LCD on the Front Panel will indicate as right.  
Note : It needs your hand to release with flipping.

```
U : F1  D : 08  TC : 70
R : F0  L : 07  PC : 76
```

17. Press the [CAM(SET)] key.  
The LCD on the Front Panel will indicate as right,

```
U : F1  D : 08  TC : 70    0
R : F0  L : 07  PC : 76    0
```

18. Confirm the following.
- The LCD on the Front Panel will indicate 64 steps of each change, when it turns to the upper and lower sides and right.
  - The value of Pan and Tilt on the LCD will return to ZERO, when the Joystick is returned to the center.

```
U : F1  D : 08  TC : 70    0
R : F0  L : 07  PC : 76    0
```

19. Turn off the power to finish the calibration.

## 2. Zoom Wheel Calibration

### ■ The Zoom Wheel Calibration is required in the following cases

- In case of replacing the Joystick Unit.
- In case of disassembling the Joystick Unit.
- In case of replacing the Main Board.
- In case of replacing the EEPROM (IC6 on the Main Board).
- In case that calibrated data has been changed by operation mistake.

### ■ Procedure

- Turn off the power.
- To execute the Pan / Tilt Calibration Mode, Turn on the power while pressing the [8] and [MON(ESC)] keys simultaneously.

The LCD on the Front Panel will indicate as right.

```
Zoom Calibration
Admin Password  _____
```

- Enter the administrator password.  
Notes: • The factory default is "650".  
• To delete a character, press the CLEAR button.

Note: Just example, It depends on Unit.

- Press the [CAM(SET)] key.  
The LCD on the Front Panel will indicate as right.

```
T : BC  W : 45  ZC : 7D    0
```

- Press the [CAM(SET)] key for the starting adjustment.  
The LCD on the Front Panel will indicate as right.

```
T : 00  W : 00  ZC : 00    84
```

- Turn and keep the Zoom Wheel to fully right (TELE) side.

The LCD on the Front Panel will indicate as right.

```
T : 00  W : 00  ZC : 00    BD
```

7. Press the [CAM(SET)] key while turning the Zoom Wheel to right (TELE) side.  
The LCD on the Front Panel will indicate as right.

T : B D   W :   \_ \_   Z C :   \_ \_   B D

8. Turn and keep the Zoom Wheel to fully left (WIDE) side.  
The LCD on the Front Panel will indicate as right.

T : B D   W :   \_ \_   Z C :   \_ \_   4 5

9. Press the [CAM(SET)] key while turning the Zoom Wheel to left (WIDE) side.  
The LCD on the Front Panel will indicate as right.

T : B D   W : 4 5   Z C :   \_ \_   4 5

10. Return the Zoom Wheel to center.  
The LCD on the Front Panel will indicate as right.  
Note : When the Zoom Wheel is in fully left side,  
release the hand as quickly as possible.

T : B D   W : 4 5   Z C :   \_ \_   8 1

11. Press the [CAM(SET)] key.  
The LCD on the Front Panel will indicate as right.

T : B D   W : 4 5   Z C : 8 1   0

12. Confirm the following.
- The LCD on the Front Panel will indicate 4 steps of each change, when the Zoom Wheel turns to the WIDE and TELE sides.
  - The value of WIDE and TELE on the LCD will return to ZERO, when the Zoom Wheel is returned to the center..

T : B D   W : 4 5   Z C : 8 1   0

13. Turn off the power to finish the calibration.